

**REMARKS**

Claims 1-7 are now in the application and are directed to the elected invention. Claim 8 has been cancelled without prejudice or disclaimer. Claim 1 has been amended to recite "pulse drying a rubber latex having a solid concentration of 60% by weight or less, in terms of dry rubber using a pulse dryer under the conditions of a frequency of the pulse combustion of 250 to 1200 Hz and a temperature of 40 to 140°C". Basis for the recitation "a solid concentration of 60% by weight or less, in terms of dry rubber" can be found in original claim 2. Basis for the recitation "using a pulse dryer" can be found at page 5, line 13 of the present specification. Basis for the recitation "under the conditions of a frequency of the pulse combustion of 250 to 1200 Hz and a temperature of 40 to 140°C" can be found at page 3, lines 10-12 of the present specification.

Claim 2 has been amended to recite "20-60% by weight." Basis for this amendment can be found at page 3, lines 13-16 of the present specification. Claim 3 has been amended to recite "a frequency of the pulse combustion is 300 to 1000 HZ" and "a temperature of a pulse drying chamber for spraying the latex is 40 to 100°C". The recitation "a frequency of the pulse combustion is 300 to 1000 HZ" finds basis at page 3, line 11 of the specification. The recitation "a temperature of a pulse drying chamber for spraying the latex is 40 to 100°C" finds basis at page 3, line 12 of the present specification. Claim 6 has been amended to recite "wherein said pulse drying is carried out by adding a viscosity stabilizing agent to the natural rubber latex". The amendments to the claims do not introduce any new matter.

Claim 1 was rejected under 35 USC 102(b) as being anticipated by US Patent 5,252,061 to Ozer et al. (hereinafter also referred to as "Ozer"). Claim 2 was rejected under 35 USC 103(a) as being unpatentable over US Patent 5,252,061 to Ozer in view of US Patent Application Publication 2003/0092819 to Miyatake et al. (hereinafter also referred to as "Miyatake"). Claim 3 was rejected under 35 USC 103(a) as being unpatentable over US Patent 5,252,061 to Ozer in view of JP 2002-069103 to Toratani et al and US Patent 5,842,289 to Chandran et al. (hereinafter also referred to as "Chandran"). Claims 4-7 were rejected under 35 USC 103(a) as being unpatentable over US Patent 5,252,061 to Ozer in view of JP 2002-069103 to Toratani et al.

(hereinafter also referred to as “Toratani”). The cited references do not anticipate and do not render obvious claims 1-7 as amended.

As is clear from the disclosure of the present application, and as recited in the amended claims, the essence of the present invention resides in the use of the pulse drying using a pulse combustion drier under the specified conditions (i.e., a frequency of 250 – 1200 Hz and a temperature of 40 - 140°C), for drying a rubber latex having a solid concentration (or a dried rubber concentration) of 60% by weight or less, whereby the major increase in productivity and heat efficiency is achieved and the heat degradation or gelling of rubber occurring with conventional drying by heat is suppressed. As a result, the rubber quality can be readily and extremely easily controlled. Furthermore, due to the gelling being suppressed, the viscosity is decreased and the mixing process of the rubber can be streamlined as compared to prior art.

This is completely absent in the cited references.

Ozer suggests a method using a pulse combustion dryer for drying acrylic-latex. However, Ozer fails to teach the pulse combustion drying of the rubber latex having 60% by weight or less of the solid content under the above-specified pulse combustion drying conditions (i.e., frequency of 250 – 1200 Hz and temperature of 40 - 140°C). Especially, Ozer neither discloses nor teaches the problems (i.e., heat degradation and gelling of rubber liable to occur in the conventional drying heat) of the conventional rubber drying from the rubber slurry. This does not occur in the pulse combustion drying of E-PVC, emulsifiers, acrylic latexes, urea formaldehyde in Ozer et al.

Ozer fails to anticipate the present invention. In particular, anticipation requires the disclosure, in a prior art reference, of each and every recitation as set forth in the claims. See *Titanium Metals Corp. v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 1 USPQ2d 1081 (Fed. Cir. 1986), and *Akzo N.V. v. U.S. International Trade Commissioner*, 1 USPQ2d 1241 (Fed. Cir. 1986).

There must be no difference between the claimed invention and reference disclosure for an anticipation rejection under 35 U.S.C. 102. See *Scripps Clinic and Research Foundation v.*

*Genetech, Inc.*, 18 USPQ2d 1001 (CAFC 1991) and *Studiengesellschaft Kohle GmbH v. Dart Industries*, 220 USPQ 841 (CAFC 1984).

Miyatake does not overcome the above discussed deficiencies of Ozer with respect to rendering unpatentable the present invention. Miyatake suggests drying the rubber-modified resin. However, again the use of the rubber under the above-specified pulse combustion drying conditions (i.e., the frequency and temperature) and the advantageous effects and results obtained therefrom is completely absent in Miyatake et al.

Toratani does not overcome the above discussed deficiencies of Ozer with respect to rendering unpatentable the present invention. Toratani suggests the use of a viscosity stabilizing agent in the production of natural rubber from the latex thereof. However, again, Toratani neither discloses nor teaches the drying of the rubber latex using a pulse combustion dryer under the above-specified drying conditions and the above-mentioned advantageous results therefrom.

Chandran does not overcome the above discussed deficiencies of Ozer with respect to rendering unpatentable the present invention. Chandran neither discloses nor teaches the use of the pulse combustion drying of the rubber latex under the above-specified drying conditions and the above-mentioned advantageous results obtained therefrom.

The cited art lacks the necessary direction or incentive to those of ordinary skill in the art to render the rejections under 35 USC 103 sustainable. The cited art fails to provide the degree of predictability of success of achieving the properties attainable by the present invention needed to sustain a rejection under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727; 82 USPQ2d 1385 (2007), *Diversitech Corp. v. Century Steps, Inc.* 7 USPQ2d 1315 (Fed. Cir. 1988), *In re Mercier*, 185 USPQ 774 (CCPA 1975) and *In re Naylor*, 152 USPQ 106 (CCPA 1966).

Moreover, the properties of the subject matter and improvements which are inherent in the claimed subject matter and disclosed in the specification are to be considered when evaluating the question of obviousness under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727; 82 USPQ2d 1385 (2007), *Gillette Co. v. S.C. Johnson & Son, Inc.*, 16 USPQ2d.

1923 (Fed. Cir. 1990), *In re Antonie*, 195, USPQ 6 (CCPA 1977), *In re Estes*, 164 USPQ 519 (CCPA 1970), and *In re Papesch*, 137 USPQ 43 (CCPA 1963).

No property can be ignored in determining patentability and comparing the claimed invention to the cited art. Along these lines, see *In re Papesch*, supra, *In re Burt et al*, 148 USPQ 548 (CCPA 1966), *In re Ward*, 141 USPQ 227 (CCPA 1964), and *In re Cescon*, 177 USPQ 264 (CCPA 1973).

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees to Deposit Account No. 22-0185.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 21713-00059-US1 from which the undersigned is authorized to draw.

Dated: January 2, 2008

Respectfully submitted,

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